



Managing for Hardwood

Forestry is one of the top three industries in North Carolina, where approximately 62 percent of the state's 32.2 million acres are forested. Approximately 67 percent of the forest land consists of hardwood or mixed pine-hardwood. Benefits from hardwood forests include watershed protection, wildlife, timber, recreation, and aesthetics. Increased demand for hardwood, due to tighter controls on federal lands and the hardwood exports, has increased the need for management of existing hardwood stands.

What is forest management?

The Society of American Foresters defines forest management as "... the application of business methods and technical forestry principles to the operation of a forest property." Specifically, forest management is working with existing stands to ensure abundant and high-quality forest benefits now and in the future. Active forest management of hardwood stands can improve water quality, enhance wildlife habitat, increase economic benefits through such things as hunting leases and better quality timber, and enhance recreational benefits through developed trails.

BENEFITS

Watershed Protection

Few people review water quality as their responsibility, but water is essential for all life, both plants and animals. In North Carolina approximately 50 percent of the population in both rural and urban environments use surface water sources. The most prominent cause of water resource degradation in forestry is siltation, which comes from soil erosion. Under proper forest management, water resources can be protected and enhanced. Stand managers often follow best management practices that improve or protect water resources (Figure 1).

Figure 1. Erosion control with stream-side management zones.



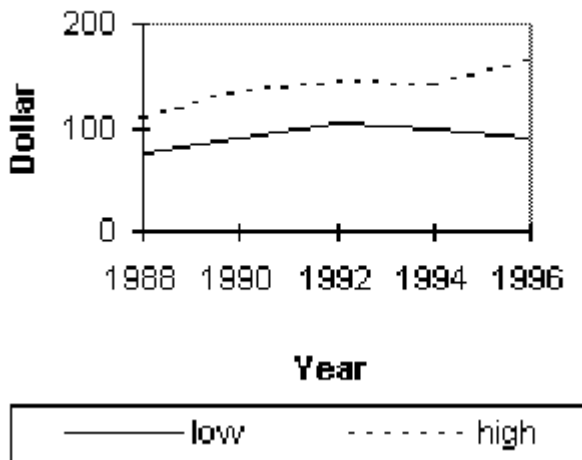
Wildlife Benefits

Wildlife benefits tend to be overlooked by most landowners, but nearly everyone enjoys observing wildlife in their natural habitat. Poor quality, unmanaged stands often lead to a lack of diversity in wildlife, but proper management can increase in wildlife diversity. Different silviculture techniques, ranging from leaving snags, to weeding and harvesting, can enhance wildlife habitat and hard-mass production, and often increase wildlife diversity. For example, thinning stands opens the forest up, resulting in succulent ground cover for browse as well as promoting vigorous timber growth.

Timber Production

In North Carolina, approximately 38 percent of the non-industrial private forest acres are owned for timber production. Much of this land is not producing up to its potential. Low productivity is especially severe where very low quality trees are growing. Poorly managed stands often lead to reduced growth and profit, but when managed, stands will often grow faster, be healthier, and more profitable (Figure 2).

Figure 2. Prices for low quality and high quality standing oak sawtimber in North Carolina. Timber Mart-South, Inc.



Recreation Benefits

In North Carolina, 10 percent of the non-industrial private forest acres are primarily or secondarily owned for recreational reasons. Through proper planning and management techniques, hardwood stands can be managed to improve their recreational benefits. For example, using permanent logging trails, landowners can create hiking trails through a stand (Figure 3). Stands can be managed for such outdoor activities as camping, hiking, hunting, or picnicking.

Figure 3. Permanent logging road used as a trail.



Aesthetics

In North Carolina, 16 percent of the non-industrial private forest acres are primarily or secondarily owned for their aesthetics. Many silviculture techniques used to manipulate stands to increase their aesthetic value, also benefit wildlife, watershed protection, timber production, and recreation. Thinning hardwood stands can create a park-like appearance, as well as increase timber growth (Figure 4).

Figure 4. Park-like appearance created by thinning a stand.



Summary

People own forest land for a variety of reasons. Some own their land primarily for timber production, while others own it for recreation and wildlife. Still others own it just for its beauty, but many owners enjoy multiple benefits. The forest will grow by itself and will often provide benefits, but a managed forest will often provide higher quality benefits at a much earlier time.

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